

1       **In the Specification**

2       Please amended page 4, lines 1-4 as follows:

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4               -- [[Fig. 8]] Figs. 8A-8D [[contains]] contain graphs that illustrate  
5 aspects of adaptive delivery of VBR/CBR MPEG I bitstreams.

6               [[Fig. 9]] Figs. 9A-B [[contains]] contain graphs that illustrate  
7 aspects of bandwidth versus frame types, in accordance with an  
8 example that is given in the text.--

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10       Please amend page 29, line 10 through page 30, line 5 as follows:

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12               --Experimental Results

13       We tested the implementation using both CBR and VBR bitstreams.  
14       Figs. 8A-D and 9A-B show some of these results. The 3Mbps VBR MPEG  
15 I bitstream is 320x240x30 fps and is two-pass-coded with minimal bitrate  
16 at 1Mbps and maximal bitrate at 4Mbps. Its GOP structure is 1I5P3B. The  
17 1.2Mbps CBR bitstream is 320x240x29.97 fps and is one pass coded. Its  
18 GOP structure is 1I3P3B.

19               [[Fig. 8]] Figs. 8A-D [[shows]] show delivered frame sizes of the  
20 first 200 frames of these two clips at different bandwidths. The curves  
21 show the average frames size over a window of 60 frames. One can clearly  
22 see which frames are escape-coded during the adaptive delivery process.  
23 The delivery bitrate of the 3Mbps VBR bitstream is also smoothed because  
24 we assumed fixed delivery bandwidth. [[Fig. 9]] Figs. 9A-B [[shows]]

1 show how the statistics of frame types change when the delivery bandwidth  
2 changes.

3 From these results one can see that bandwidths of the delivered  
4 streams are successfully reduced and smoothed. Thus, playback of these  
5 video bitstreams is possible even when the network bandwidth is far  
6 narrower than that the source bitstreams demand and when the client side  
7 buffer size is limited. From [[Fig. 9]] Figs. 9A-B one can see that frame  
8 data are preserved in the order of importance as preferred. This simple  
9 adaptation scheme can have its limitation too. For example, the frame rates  
10 of adaptation results are still not ideally adjusted because the structures of  
11 the MPEG I video sequence are fixed and the QoS factor definition is not  
12 optimal.--  
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